September 28, 2021

Dear Healthcare Provider:

Pima County has reported two cases of West Nile Virus infection so far this season. There are 158 confirmed and probable cases statewide, mostly in Maricopa County, and positive tests among mosquito samples have surged this summer.

West Nile virus is the most common mosquito-borne disease in Arizona and should be considered in any patient exhibiting febrile illness and neurological symptoms who may have had contact with mosquitoes, blood transfusion, or organ transplant. Human cases lag the population curve of mosquitoes, so this is the time of year that most cases are usually identified. Please consider it in your differential diagnosis when appropriate.

West Nile virus can present similarly to St. Louis encephalitis virus, and it is recommended to include testing for both viruses whenever testing for West Nile. When collecting specimens for testing, consider both WNV and SLEV diagnostic tests due to this similarity in presentation, especially if neuroinvasive disease is present. WNV is often not included in the panel and can be ordered as a stand-alone test. Please check with your laboratory provider for test availability and specimen shipping recommendations.

Collect additional samples (blood in a serum separator tube or cerebrospinal fluid) to be sent to ASPHL as needed:

1. Arrange for commercial laboratory testing concurrently with ASPHL testing for WNV, order IgM serology through your usual commercial laboratory
   • For SLEV, order IgM serology through your usual commercial laboratory
   • If the laboratory does not have SLEV testing capacity, contact Pima County Public Health Department Epidemiology 520-724-7797, to arrange for IgM serology at ASPHL

Note: in cases of CNS disease, IgM antibodies should be detectable at presentation of CNS symptoms. In non-CNS disease, IgM antibody may not be detectable for the first 7 days of illness.

No specific antiviral therapy is available for either SLEV or WNV disease. Treatment is supportive and may include rest, fluids and analgesics and antipyretics.

Please see https://www.azdhs.gov/preparedness/epidemiology-disease-control/mosquito-borne/west-nile-virus/index.php#providers for information on clinical presentation, diagnostic testing, treatment, and additional information and resources. Please report each suspected case to the Pima County Health Department at 520-724-7797 within 5 days of clinical suspicion. Do not wait for a test result. Thank you for your continued service to our community. For further information or any questions, please contact PCHD 520-724-7797.